

A

		Accession		
		Number	Gene	Description
Secreted Proteins	4h CD40L	W62918	EBI3	Epstein-Barr Virus-induced gene 3 (IL-12 p40 related)
	12h CD40L	X01971	IFN α 5	Interferon Family Gene 5
	24h CD40L	U02298	RANTES	Chemokine CCL5
	72h CD40L	X56602	ISG15	Interferon-stimulated Gene 15kD
	1 Wk CD40L	M86829	IP10	Chemokine CXCL10
Intracellular Proteins	4h LPS	L32974	IFIT3	Interferon-Induced Protein w. Tetratricopeptide Repeats
	12h LPS	M21117	Mx1	Interferon-Induced GTPase
	24h LPS	U43085	IFIT2	Interferon-Induced Protein w. Tetratricopeptide Repeats
	72h LPS	U43084	IFIT1	Interferon-Induced Protein w. Tetratricopeptide Repeats
	1 Wk LPS	U73037	IRF7	Interferon Regulatory Factor 7
	4h WKLPS	AA146282	Similar to IFI204	Similar to Interferon-Activable Protein 204
	12h WKLPS	AA013783	Similar to hIFI35	Similar to Human Interferon-Induced 35kD Protein
	24h WKLPS	AA163988	Similar to IFI203	Similar to Interferon-Activable Protein 203
	72h WKLPS	L38281	IRG1	Immune-Responsive Gene 1
	1 Wk WKLPS	U51992	IRF9	Interferon Regulatory Factor 9
		U19119	IFI1	Interferon-Inducible Protein 1
		AA034846	Cbkr12	Chemokine (C-C) Receptor 1, -like 2
		W29434	IFI-TM3I	Interferon-Induced Transmembrane Protein 3-like
		U09928	PKR	dsRNA-Activated Protein Kinase

B

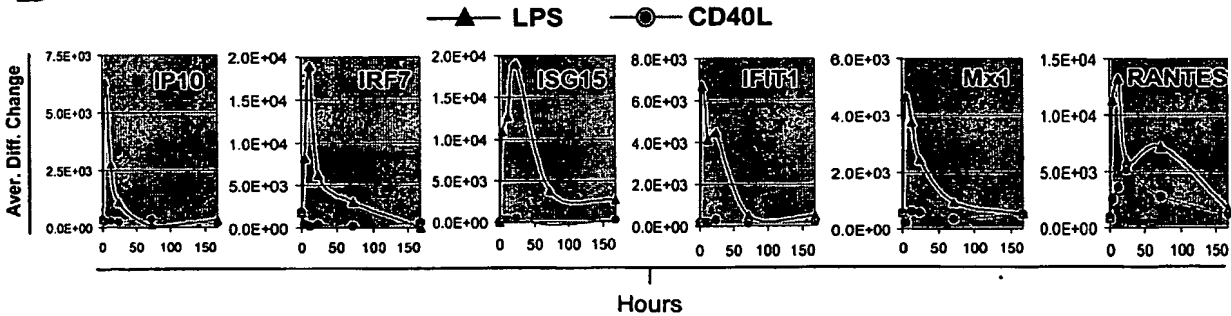


FIGURE 1

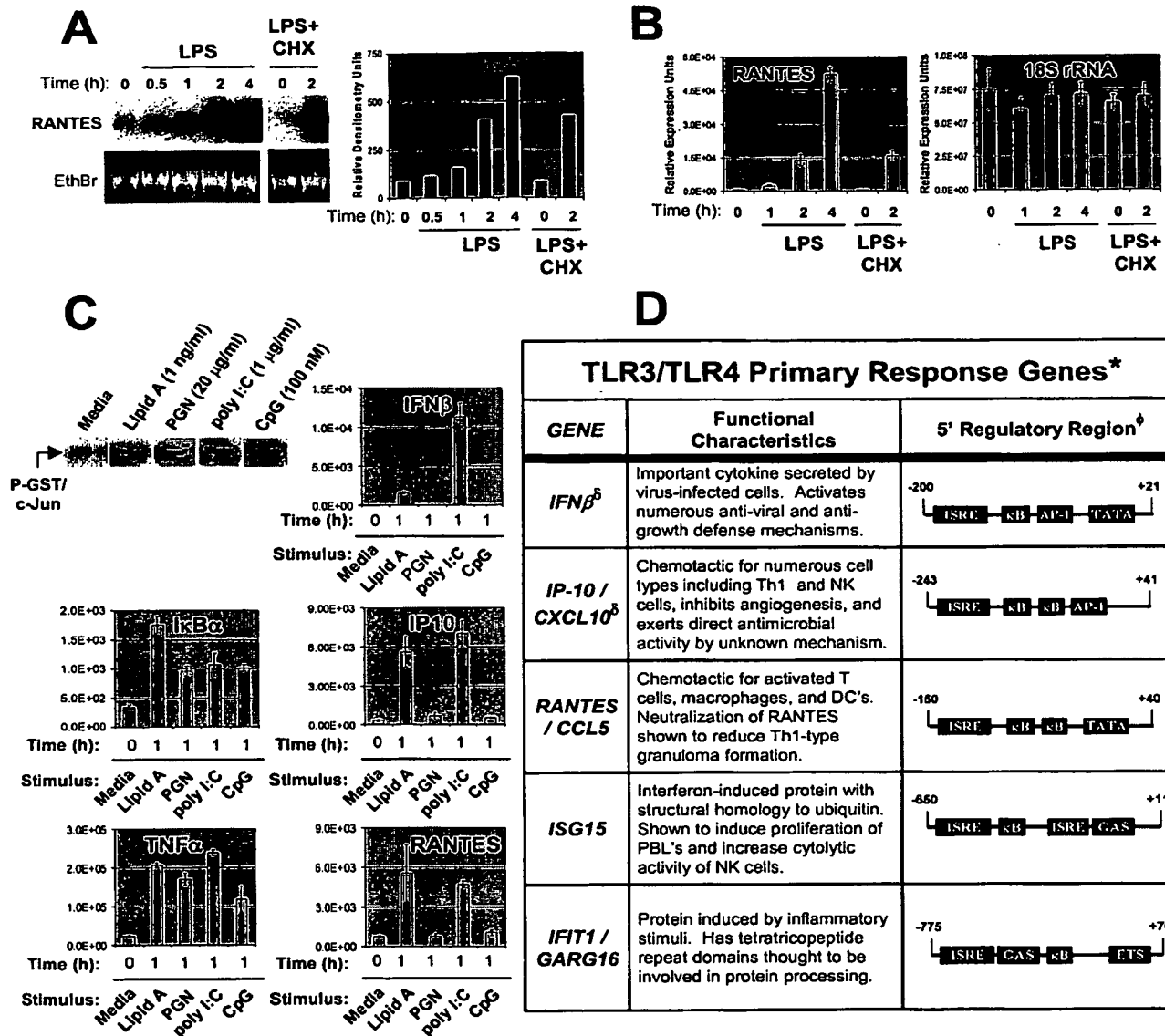
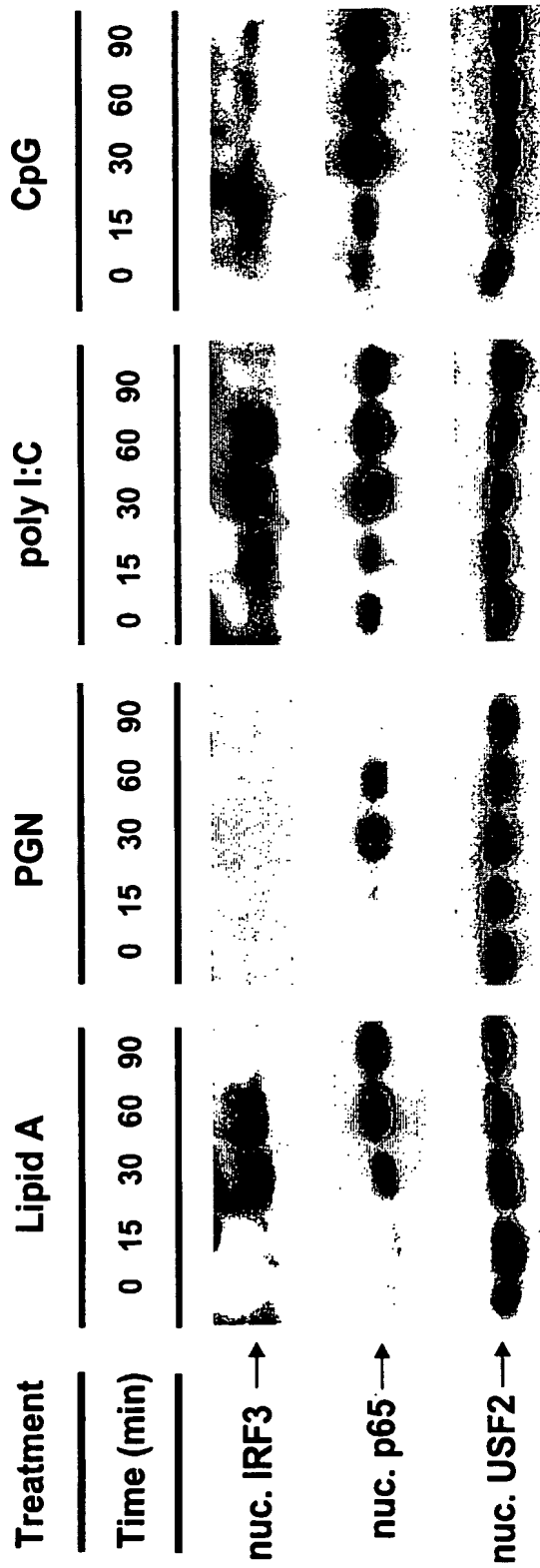
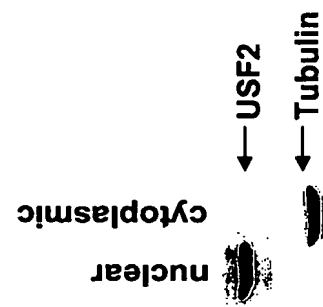


FIGURE 2

A



B



C

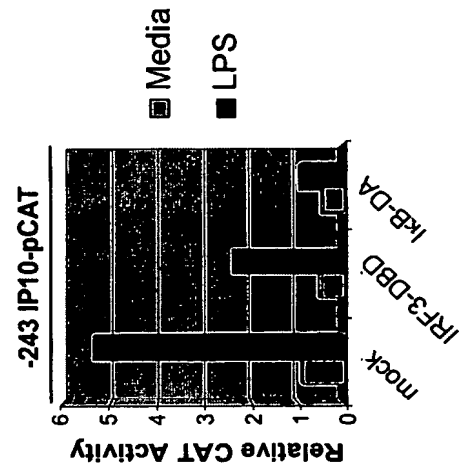


FIGURE 3

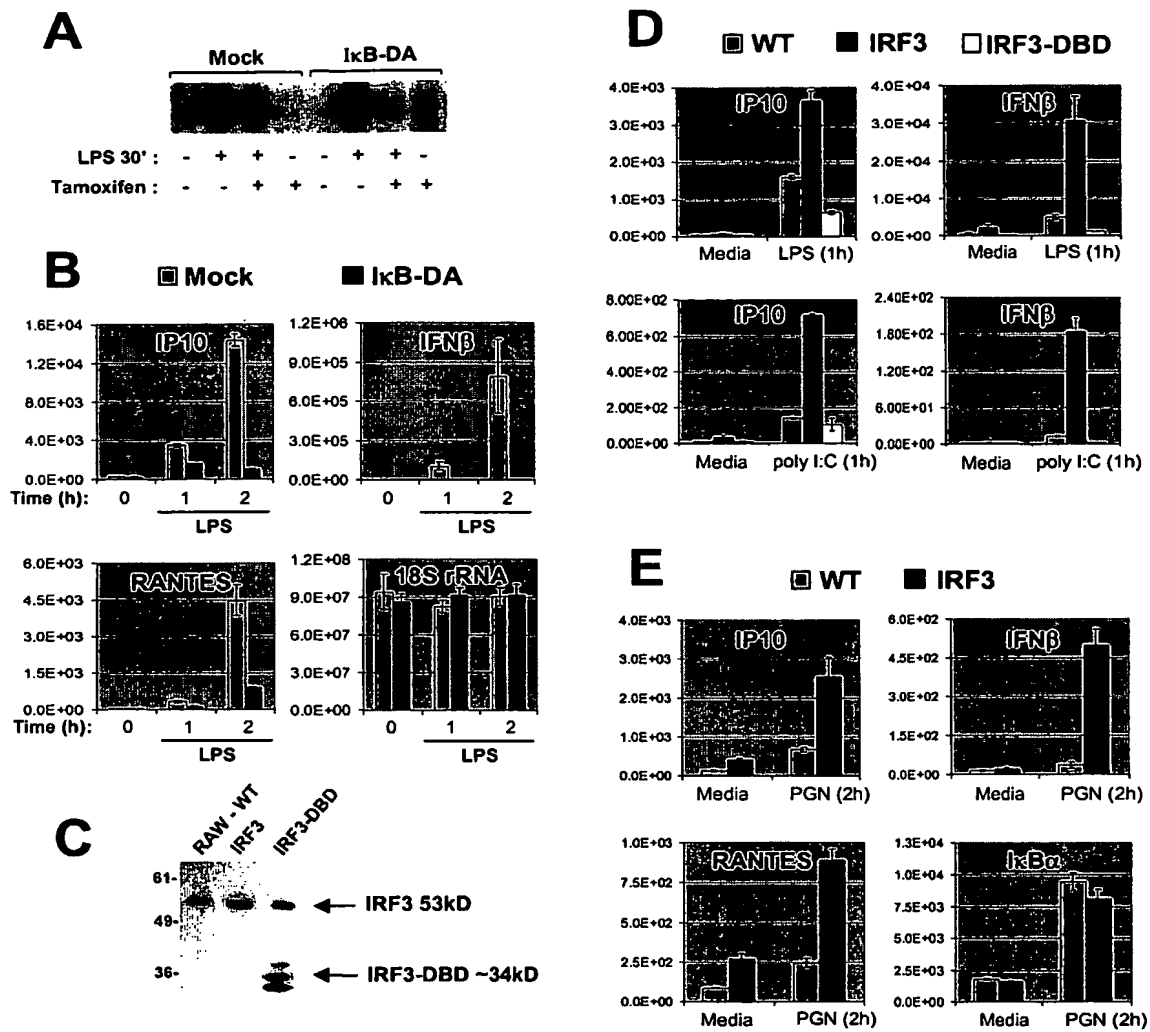
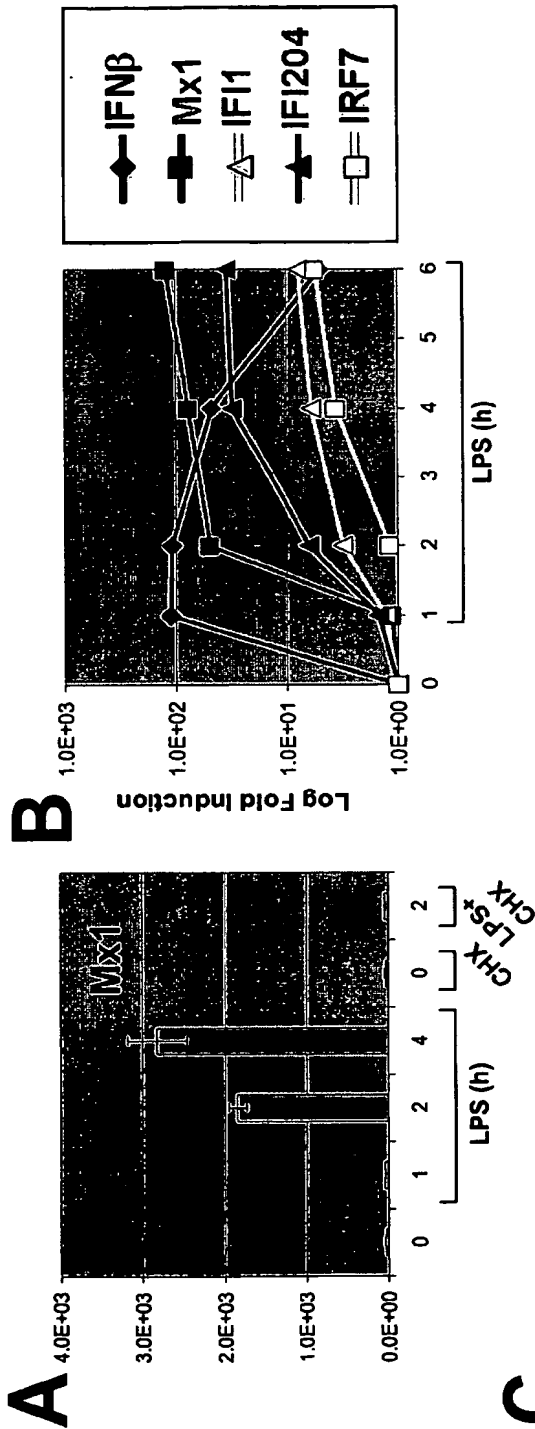


FIGURE 4



TLR3/TLR4 Secondary Response Genes*					
GENE	Functional Characteristics	Induced by		Confers Resistance to ϕ :	
		LPS	Virus	Bacteria	Virus
<i>Mx1</i>	Cytoplasmic and nuclear GTPase. Resistance to virus thought to be due to indirect modification of cellular functions needed along the viral replication pathway.	+	+	N/D	+
<i>IFI1</i>	GTPase with unknown cellular function.	+	+	+	N/D
<i>IFI204</i>	Nucleolar member of HIN200 Family. Shown to inhibit growth and delay cell cycle progression; possibly by binding to Rb and UBF1.	+	+	N/D	N/D
<i>IRF7</i>	Member of Interferon Regulatory Factor Family. IRF3 and IRF7 shown to be required for positive feedback upregulation of IFN- α/β upon viral infection.	+	+	N/D	N/D

FIGURE 5

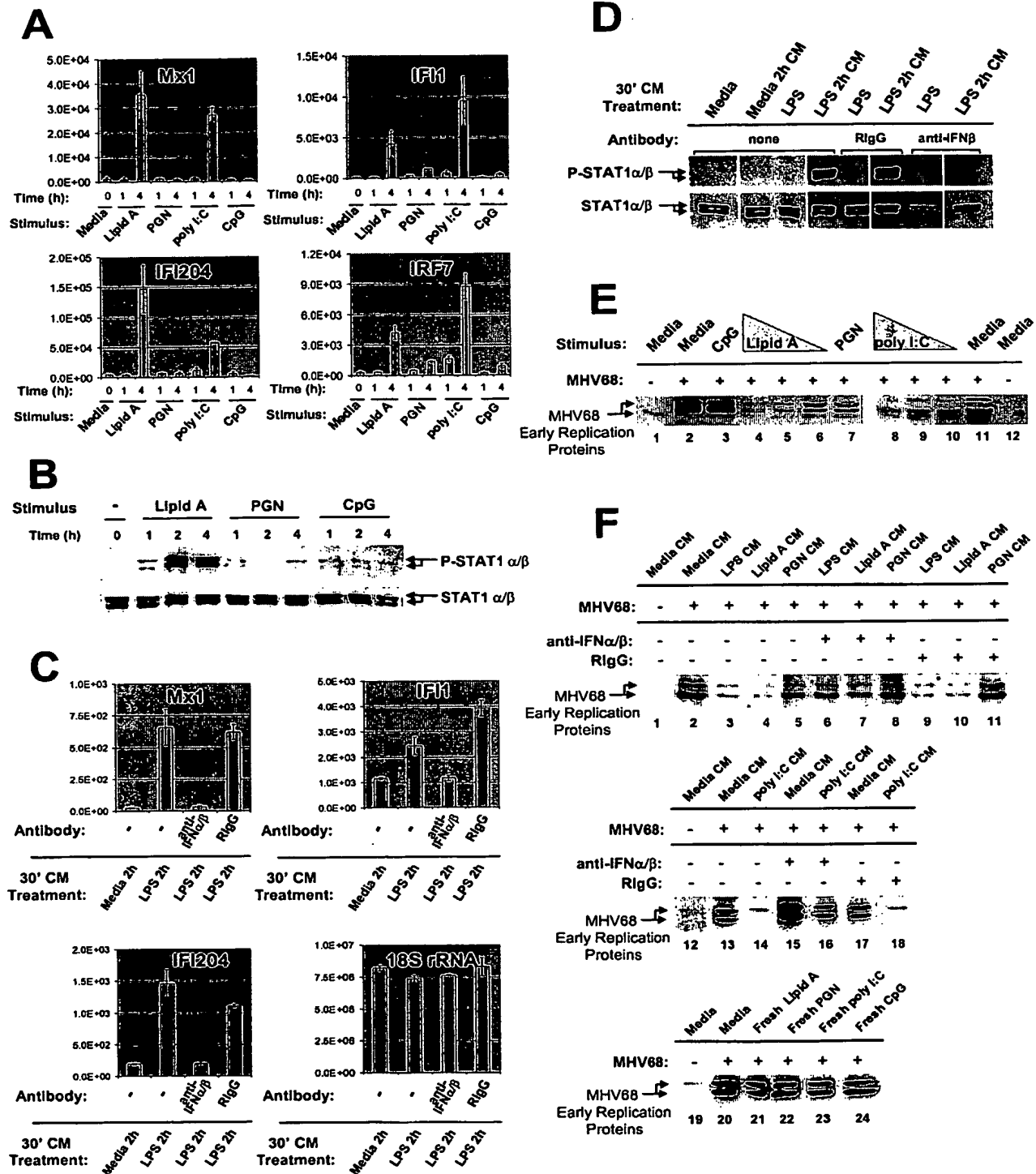


FIGURE 6

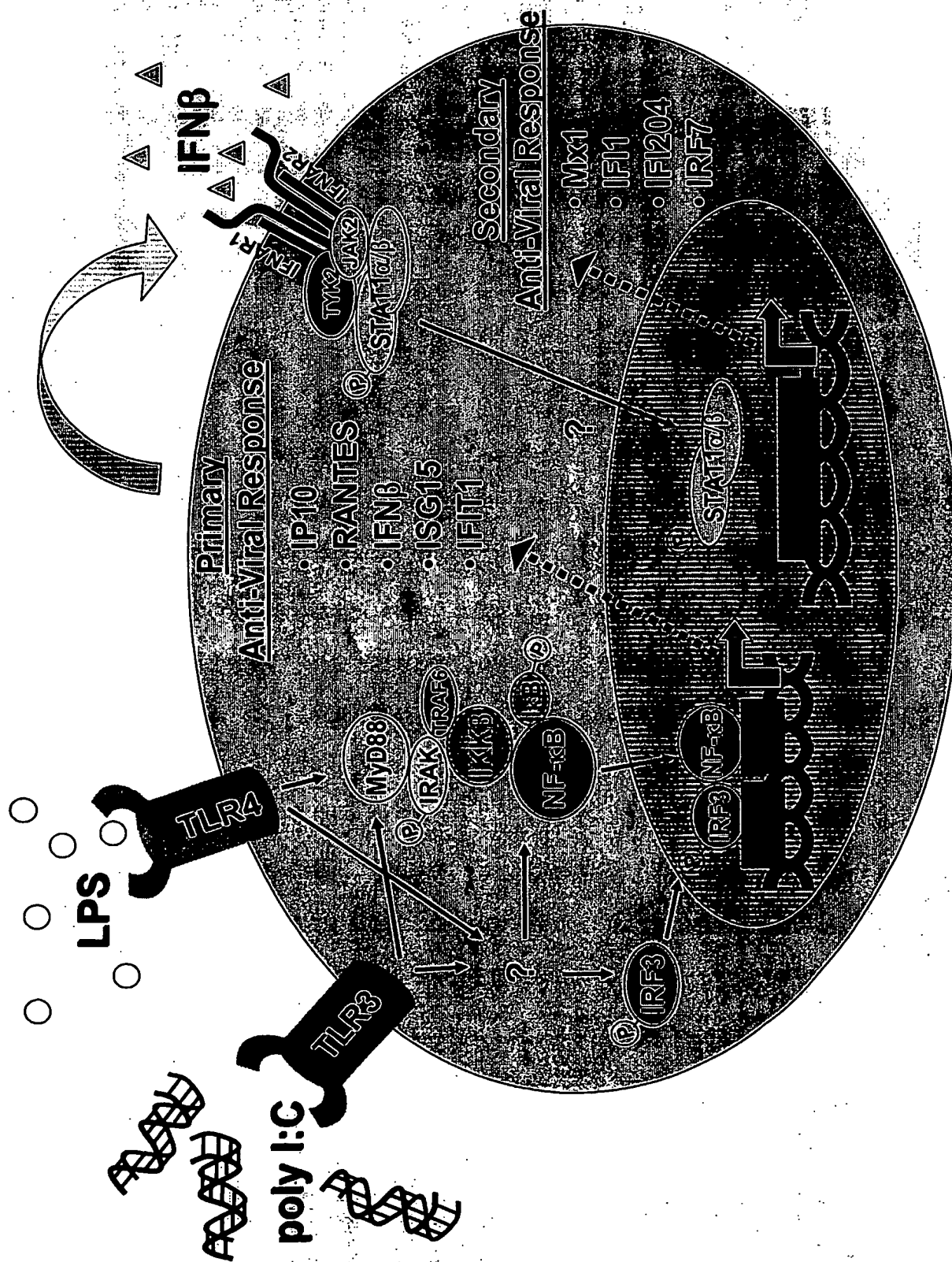


FIGURE 7

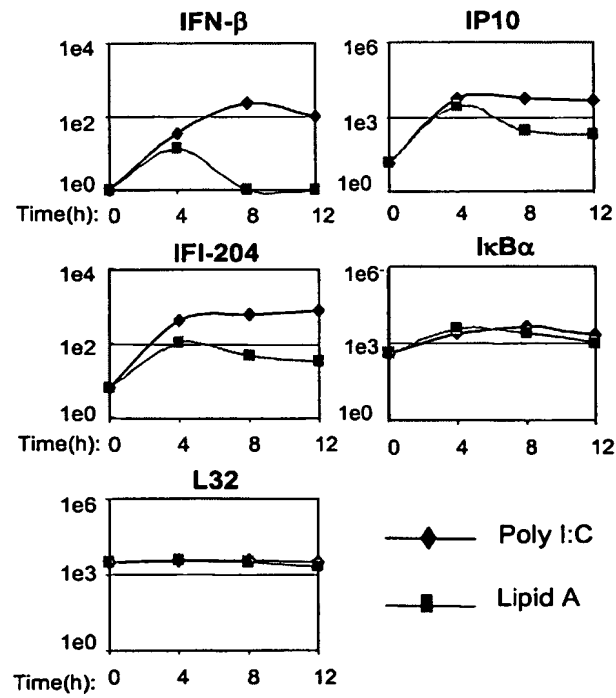


FIGURE 8

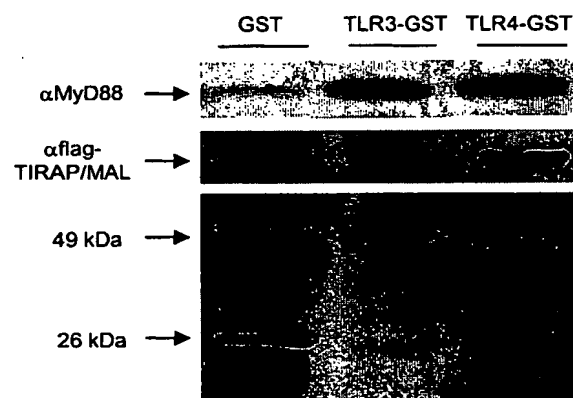


FIGURE 9

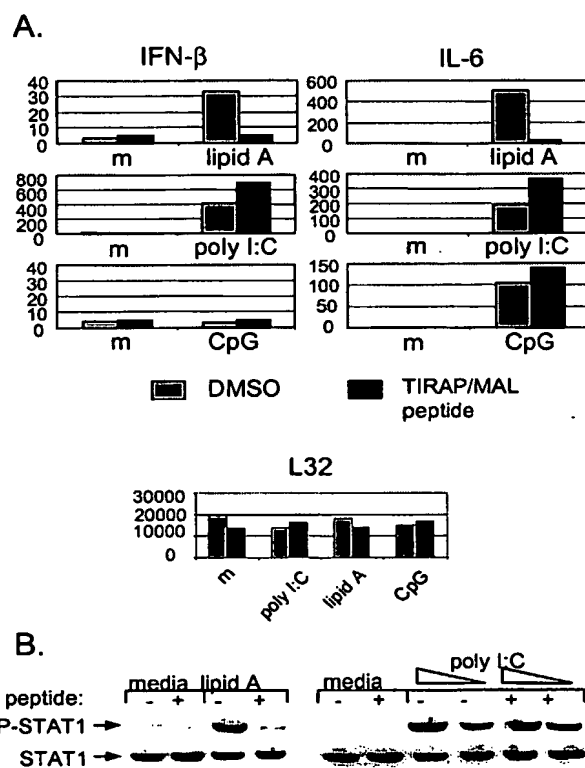
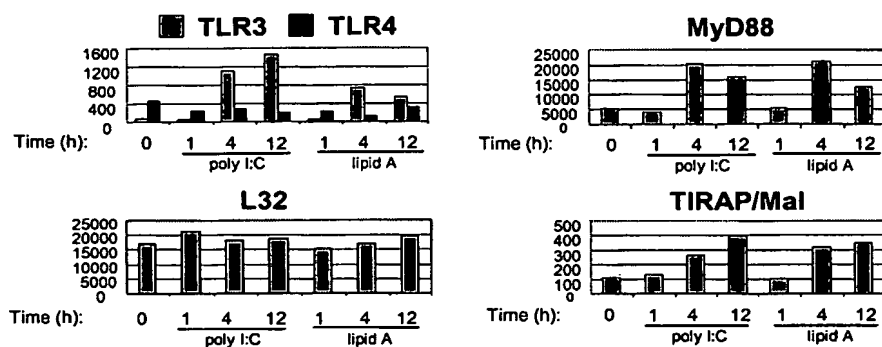


FIGURE 10

A.



B.

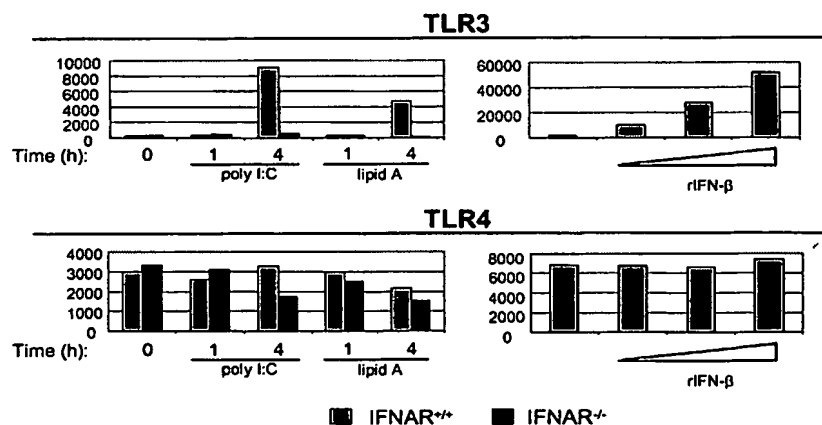


FIGURE 11

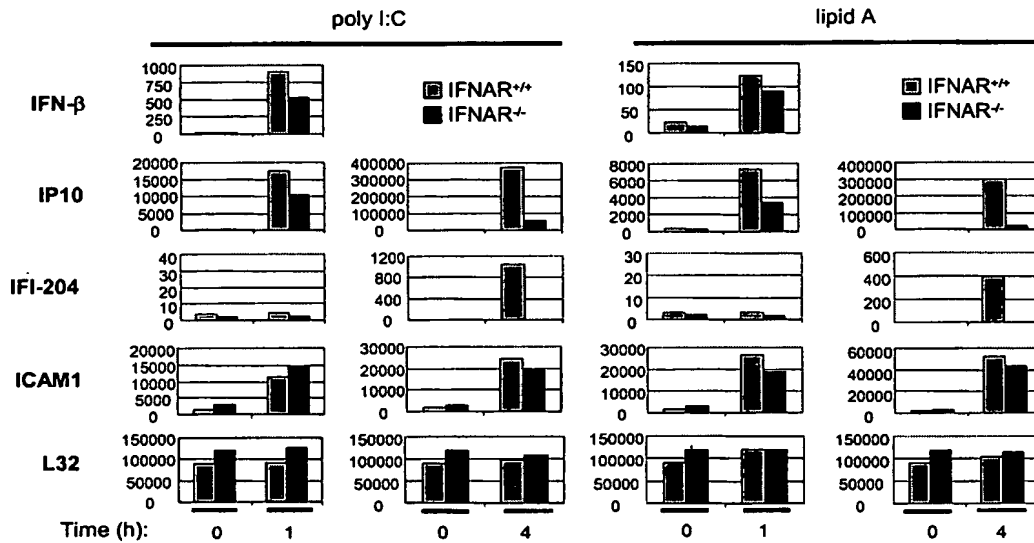


FIGURE 12

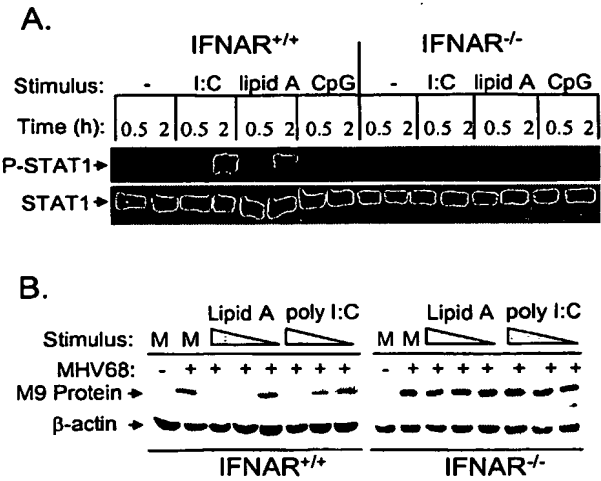
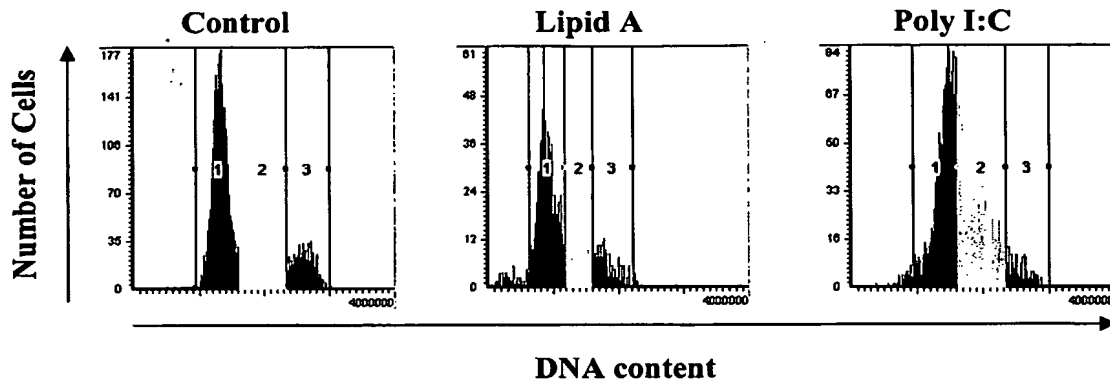


FIGURE 13

TLR3/4 Activation Leads to an IFN-dependent G1/S Block in Murine Macrophage Cells

A.



B.

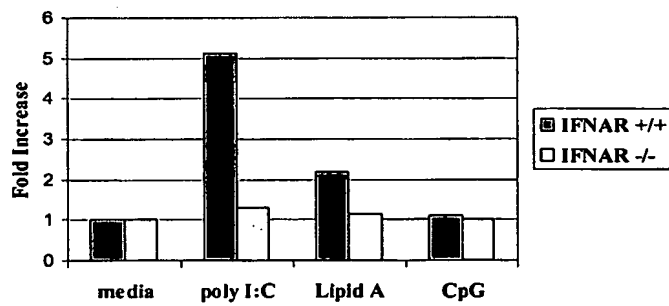


FIGURE 14

TLR3/4 Specificity Upregulate Genes Involved in the G1/S Transition

A.

4h 100 nM CpG	Accession	Description
4h 1 µg/ml poly IC	Number	
4h 1 ng/ml Lipid A		
	M96163	Serum-Inducible Kinase (SNK)
	AF005885	Cyclin G2
	W90992	Cyclin D2
	M83749	Cyclin D2

B.

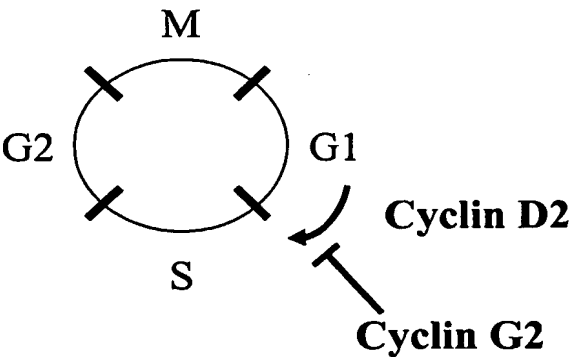


FIGURE 15

TLR3 Activation Increases Apoptosis in the RAW 264.7 Macrophage Cell Line

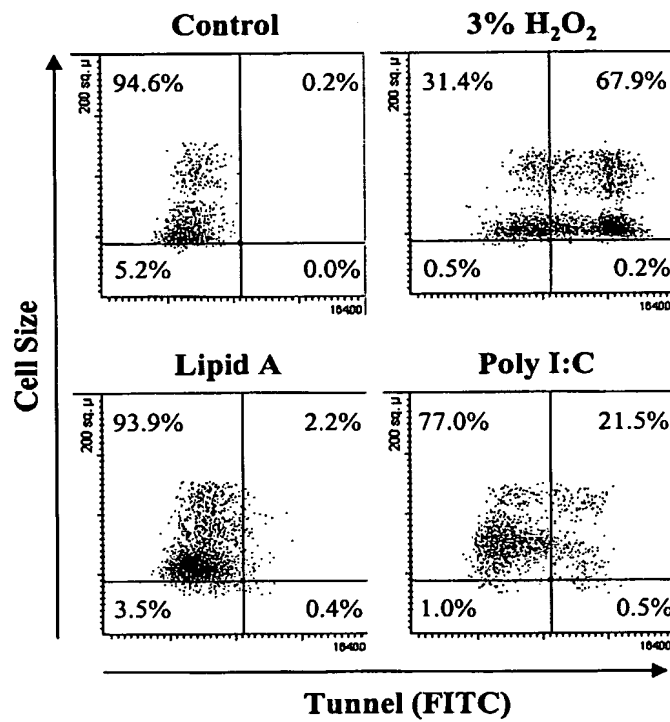


FIGURE 16

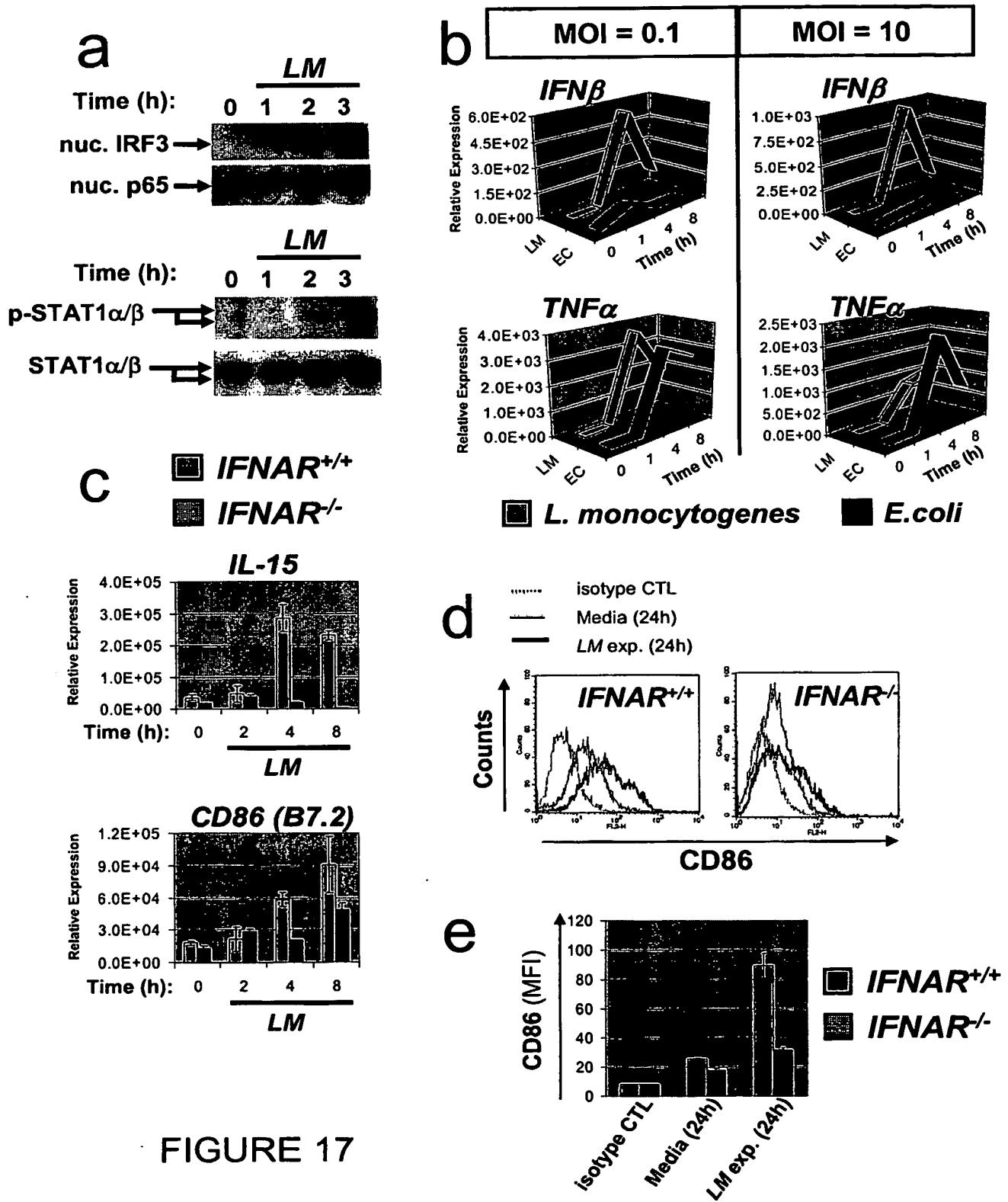


FIGURE 17

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